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| APPLICATION NO.          | FILING DATE  | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|--------------------------|--|----------------------|---------------------|------------------|--|
| 10/662,917               | 09/15/2003   | Iqbal Jami           | 4-2                 | 2734             |  |
|                          | 7590 10/14/200<br><b>MINISTRATOR</b>                                 | 8                    | EXAMINER            |                  |  |
| LUCENT TECHNOLOGIES INC. |  |                      | HO, HUY C           |                  |  |
|                          | ROOM 2F-192<br>600-700 MOUNTAIN AVENUE<br>MURRAY HILL, NJ 07974-0636 |                      | ART UNIT            | PAPER NUMBER     |  |
| MURRAY HIL               |  |                      | 2617                |                  |  |
|                          |  |                      |                     |                  |  |
|                          |  |                      | MAIL DATE           | DELIVERY MODE    |  |
|                          |  |                      | 10/14/2008          | PAPER            |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  | Application No.  | Applicant(s)   |             |  |  |  |
|--|--|--|-------------|--|--|--|
|  | 10/662,917   | JAMI ET AL.  |             |  |  |  |
| Office Action Summary  | Examiner   | Art Unit   |             |  |  |  |
|  | HUY C. HO  | 2617   |             |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c   | orrespondence ad   | ldress      |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | <b>J.</b> nely filed the mailing date of this c D (35 U.S.C. § 133). |             |  |  |  |
| Status   |  |  |             |  |  |  |
| 1)⊠ Responsive to communication(s) filed on <u>06/23</u>   | 2/2008.  |  |             |  |  |  |
|  | action is non-final.   |  |             |  |  |  |
| 3) Since this application is in condition for allowan  |  | secution as to the   | e merits is |  |  |  |
| closed in accordance with the practice under <i>E</i>  |  |  |             |  |  |  |
| Disposition of Claims  |  |  |             |  |  |  |
| 4)⊠ Claim(s) <u>1-3,5-8 and 10</u> is/are pending in the a   | pplication.  |  |             |  |  |  |
| 4a) Of the above claim(s) is/are withdraw  | vn from consideration.   |  |             |  |  |  |
| 5) Claim(s) is/are allowed.  |  |  |             |  |  |  |
| 6)⊠ Claim(s) <u>1-3,5-8 and 10</u> is/are rejected.  |  |  |             |  |  |  |
| 7) Claim(s) is/are objected to.  |  |  |             |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | election requirement.  |  |             |  |  |  |
| Application Papers   |  |  |             |  |  |  |
| 9)☐ The specification is objected to by the Examine  | -  |  |             |  |  |  |
| 10)⊠ The drawing(s) filed on 09/15/2003 is/are: a)⊠ accepted or b)□ objected to by the Examiner.   |  |  |             |  |  |  |
| Applicant may not request that any objection to the o  | • •  |  |             |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |  |  |             |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |  |  |             |  |  |  |
| Priority under 35 U.S.C. § 119   |  |  |             |  |  |  |
| 12)⊠ Acknowledgment is made of a claim for foreign   | priority under 35 H.S.C. & 119(a)  | -(d) or (f)  |             |  |  |  |
| a)⊠ All b)□ Some * c)□ None of:  | priority under 55 5.5.5. § 115(a)  | (a) or (i).  |             |  |  |  |
| 1. ☐ Certified copies of the priority documents  | s have been received   |  |             |  |  |  |
| 2. Certified copies of the priority documents  |  | on No  |             |  |  |  |
|  |  | <u> </u>   | Stage       |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  |  |  |             |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |  |  |             |  |  |  |
|  | ,  |  |             |  |  |  |
| Attachmont/e\  |  |  |             |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)   | 4) Interview Summary   | (PTO-413)  |             |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Da  | nte  |             |  |  |  |
| 3) Information Disclosure Statement(s) (PTO/SB/08)   | 5) Notice of Informal P  | atent Application  |             |  |  |  |
| Paper No(s)/Mail Date  | 6) [ Other:  |  |             |  |  |  |

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## **DETAILED ACTION**

## Response to Arguments

1. Applicant's arguments filed 06/23/2008 have been fully considered but they are not persuasive.

The argued features, i.e., a method for transferring a call connection between dedicated and shared channels by determining amount of data buffered, quality of signal transmission, i.e., signal attenuation and acknowledgement of signal transmitted over channels, read upon Winberg, Helmerson and Wallentin as follows.

Winberg teaches a method and system for channel switching between shared channel and dedicated channel in UMTS system based on the traffic volume low or high on the channels, thus Winberg discloses method for transferring a call connection between dedicated and shared channels by determining amount of data buffered (see the abstract, page 1, lines 20-32, page 2 lines 1-30). Winberg in view of Helmersson, teaches a switching scheme for shared channels and dedicated channels based on the signal qualities (see the abstract, page 9 lines 23-30, page 10 lines 4-30, page 11 lines 3-30), thus disclosing a method for transferring a call connection between dedicated and shared channels by determining quality of signal transmission, i.e., signal attenuation. Winberg in view of Helmersson and further in view of Wallentin teaches a method and system for dynamically adapting connections between common channels and dedicated channels in a mobile communication system based on amount of data buffered and packet data acknowledgements on channels (see col 7 lines 10-67, col 8 lines 1-67), thus disclosing method for transferring a call connection between dedicated and shared channels by acknowledgement of signal transmitted over channels.

As a result, the claimed features were written such that they read upon the cited references. The rejection is maintained.

## Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 4. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 5. Claims 1-3, 5-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winberg (GB 2369003) in view of Helmerson (WO 02/067606) and further in view of Wallentin et al. (6,347,091).

Consider claim 1 (Previously Presented) Winberg discloses a method of transfer of a call connection connecting a telecommunications base station and a mobile user terminal between dedicated channels in both directions therebetween and shared channels in both directions therebetween (see the abstract), comprising:

determining the amount of data buffered at the base station and the user terminal for transmission therebetween and/or the rate that data arrives at the base station and user terminal for

transmission therebetween (page 2 lines 23-30, page 4 lines 20-25, page 5 lines 15-30);

determining a value of a measured parameter of the signals between the base station and the user terminal (page 2 lines 20-30, page 4 lines 12-18); and

deciding to make the transfer, dependent upon said value and upon said amount or rate (page 2 lines 23-30, page 4 lines 20-25, page 5 lines 15-30, page 7 lines 20-21);

and upon said determination whether or not the shared channels operate such that of receipt is sent on receiving data (page 2 lines 1-30, page 3 lines 1-32, page 4 lines 1-21).

determining whether or not the shared channels are to operate (discussing common channels are used by mobile stations for sending and receiving data, the switching between common channel and dedicated channel is determined and controlled by the Radio Resource Controller RRC in the Radio Network Controller RNC based on variety of factors such as traffic volume measurements, buffer level measurements, data throughput measurements; page 3 lines 1-21, discussing different users have different requirements for data transfer frequency and intensity, this may cause channel switching increase rapidly; page 3 lines 23-32, page 4 lines 1-21, discussing RNC determines switching between allocated channels based on relevant parameters specifically allocated to a user mobile station).

Winberg does not show signal attenuation or propagation delay, but it is noticeable Winberg discusses signaling load on the network that cause channel switching (see page 7 lines 20-21).

Helmerson discloses signal attenuation or propagation delay (see page 11 lines 27-31, page 12 lines 20-31, page 13 lines 1-3).

Since both Winberg and Helmerson teach system and method for channel allocation, channel switching, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Winberg teaching, and have signal attenuation or propagation delay, taught by Helmerson, to improve the system and method for facilitating resource allocation, as discussed by Helmerson (see page 1 lines 5-29, page 3 lines 1-31, page 4 lines 1-31 and lines 5 lines 1-20).

Winberg, as modified by Helmerson, does not specifically show "an acknowledgement of receipt is sent on receiving data", however, it in noticeable Winberg discusses the parameters are used for determining of the switching are modified in response to the previous message of data in or out of the user equipment device (see page 4 lines 4-18) and Winberg discloses the layer 2 structure of Figure 1 that consists of Radio Link Control entities which provide reliable data transfer in the network (see page 1 lines 20-30), thus this discloses a dynamic response of data transmission and data receipt. Wallentin is discussing method for dynamically adapting a connection state in a mobile system, where different types of radio channels such as common/shared channels and dedicated channels are selected based on traffic parameters such as connection bit rate, propagation delay, buffer size, etc.,(see the abstract, col 7 lines 64-67, col 8 lines 1-36, col 9 lines 10-47), Wallentin comes to disclose the acknowledgement of received data packets transmitted from a packet buffer to the URAN system (see col 7 lines 43-61), thus Wallentin discloses an acknowledgement of receiving data.

Since both Winberg, Helmerson and Wallentin teach method and system for channel switching in UMTS system, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Winberg's teachings, as modified by Helmerson, and have an acknowledgement of receipt is sent on receiving data, taught by Wallentin, to improve the system discussed by Winberg (see page 1 lines 10-32, page 2 lines 1-30).

Consider claim 6, (Previously Presented) Winberg discloses a telecommunications system comprising a base station and a mobile user terminal, the base station and the user terminal being in use in call connection over dedicated channels or shared channels (see page 1 lines 10-33),

the base station comprising decision means, a channel allocator, and a processor (page 1 lines 10-33, page 5 lines 15-28),

the decision means being operative to control transfer of the call connection by the channel allocator between the dedicated channels and the shared channels dependent upon (page 2 lines 10-30, page 3 lines 28-32, page 4 lines 1-6):

a first input signal to the decision means indicating the amount of data buffered at the base

station and the user terminal for transmission therebetween and/or the rate that data arrives at the base station and user terminal for transmission therebetween (page 2 lines 23-30),

a second input sisal to the decision means indicating the value of a measured parameter of the signals between the base station and the user terminal, the parameter being the parameter value being determined by the processor (page 2 lines 20-30, page 4 lines 12-18), and

a third input signal to the decision means indicating whether or not the shared channels are to operate such that of receipt is sent on receiving data (discussing common channels are used by mobile stations for sending and receiving data, the switching between common channel and dedicated channel is determined and controlled by the Radio Resource Controller RRC in the Radio Network Controller RNC based on variety of factors such as traffic volume measurements, buffer level measurements, data throughput measurements; page 3 lines 1-21, discussing different users have different requirements for data transfer frequency and intensity, this may cause channel switching increase rapidly; page 3 lines 23-32, page 4 lines 1-21, discussing RNC determines switching between allocated channels based on relevant parameters specifically allocated to a user mobile station).

Winberg does not show signal attenuation or propagation delay, but it is noticeable Winberg discusses signaling load on the network that cause channel switching (see page 7 lines 20-21).

Helmerson discloses signal attenuation or propagation delay (see page 11 lines 27-31, page 12 lines 20-31, page 13 lines 1-3).

Since both Winberg and Helmerson teach system and method for channel allocation, channel switching, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Winberg teaching, and have signal attenuation or propagation delay, taught by Helmerson, to improve the system and method for facilitating resource allocation, as discussed by Helmerson (see page 1 lines 5-29, page 3 lines 1-31, page 4 lines 1-31 and lines 5 lines 1-20).

Winberg, as modified by Helmerson, does not specifically show "an acknowledgement of receipt is sent on receiving data", however, it in noticeable Winberg discusses the parameters are used for determining of the switching are modified in response to the previous message of data in or out of the user equipment device (see page 4 lines 4-18) and Winberg discloses the layer 2 structure of Figure 1 that consists of Radio Link Control entities which provide reliable data transfer in the network (see page 1 lines 20-30), thus this discloses a dynamic response of data transmission and data receipt. Wallentin is discussing method for dynamically adapting a connection state in a mobile system, where different types of radio channels such as common/shared channels and dedicated channels are selected based on traffic parameters such as connection bit rate, propagation delay, buffer size, etc.,(see the abstract, col 7 lines 64-67, col 8 lines 1-36, col 9 lines 10-47), Wallentin comes to disclose the acknowledgement of received data packets transmitted from a packet buffer to the URAN system (see col 7 lines 43-61), thus Wallentin discloses an acknowledgement of receiving data.

Since both Winberg, Helmerson and Wallentin teach method and system for channel switching in UMTS system, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Winberg's teachings, as modified by Helmerson, and have an acknowledgement of receipt is sent on receiving data, taught by Wallentin, to improve the system discussed by Winberg (see page 1 lines 10-32, page 2 lines 1-30).

Consider claims 2 and 7, (Original) a method of transfer of a call connection according to claims 1 and 6, Winberg, as modified by Helmerson, teaches in which for a shared channel call connection, upon the parameter value being determined as being less than a predetermined threshold, transfer is made to dedicated channels (page 9 lines 14-30).

Consider claims 3 and 8, (Original) A method of transfer of a call connection according to claim 1 or claim 2 and claim 6, Winberg, as modified by Helmerson, teaches in which for a dedicated channel call connection, upon the parameter value being determined as being more than a predetermined threshold, transfer is made to shared channels (page 10 lines 4-20).

Consider claims 5 and 10, (Original) A method of transfer of a call connection according to claims 1 and 6, Winberg, as modified by Helmerson, further teaches in which the shared channels are a Random Access Channel (RACH) and a Forward Access Channel (FACH), the base station comprises a radio network controller, and the base station and user terminal operate to transfer the call connection in accordance with the Universal Mobile Telecommunication System (UMTS) standard (the abstract, page 3 lines 28-31, page 4 lines 12-18, page 5 lines 6-30).

## Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY C. HO whose telephone number is (571)270-1108. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Eisen can be reached on 571-272-7687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available

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through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10/10/2008 Huy Ho.

/Alexander Eisen/

Supervisory Patent Examiner, Art Unit 2629